

Propwashed.com Beginners Training Guide

Learn how to fly a Hubsan X4 or Syma X11 fast!

Preflight Check

- Propellers in good condition?
- Prop guard on and secure (props not touching)?
- Arms and body of quadcopter in good condition?
- Turn transmitter on
- Connect battery to quadcopter
- Hover slightly to check for responsiveness / odd spins
- Location safe to fly?

Mode 2 Controls:

Control	Motion	Use
Left Stick	Up and down	Throttle up and throttle down. Will give you altitude (height) and be your speed control.
Left stick	Right and left	Rudder / yaw right and left. Will rotate the quadcopter right and left (think a turning motion).
Right stick	Up and down	Elevator / pitch forward and back. This will move your quadcopter in a forwards or backwards motion.
Right stick	Right and left	Aileron / roll right and left. This will move your quadcopter sideways right and left.

If you experience odd rotation, or see your quadcopter floating in a direction it shouldn't be, try adjusting the trim. Detailed instructions on adjusting the trim can be found in the manual.

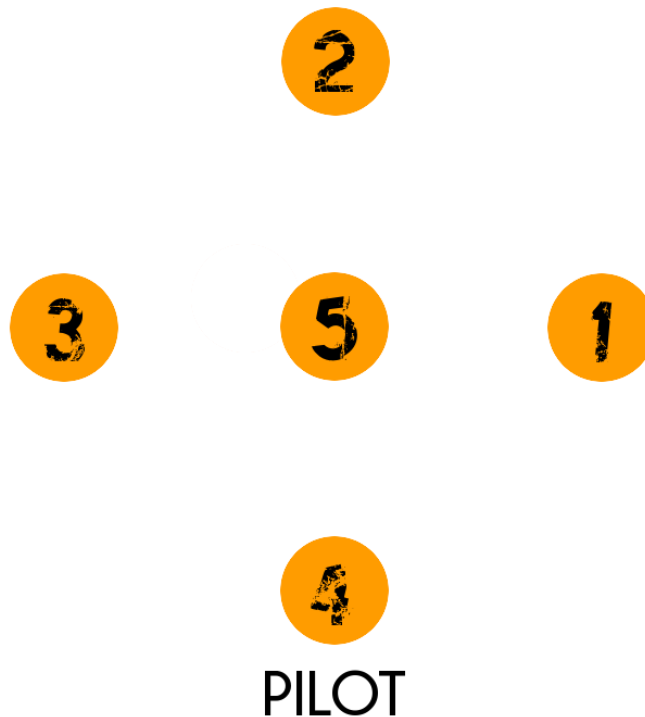
More guides and information available at www.propwashed.com!

Exercises

To setup these exercises, you will need five cones (or some other type of marking you can reference) to setup a course for your quadcopter. The idea here will be to fly over each one in a certain order.

For all of these exercises, you will setup the 5 cones in a diamond shape and position yourself behind cone 4 as shown below:

Drone Training Guide propwashed.com



- Distances are up to you, set them up as far or as close as you like.
- For the below exercises, follow the path of the roman numerals. If it helps you, draw out the course over the numbers to mentally prepare which directions to take.
- Pay attention to how the quadcopter should be positioned in each exercise. The easier exercises position the quadcopter always facing the same direction as the pilot (not flying towards yourself) while the harder exercises position the quadcopter always facing the next target cone.

More guides and information available at www.propwashed.com!

Exercise 1 – Warm ups / flying introduction [EASY]

A simple set of exercises to get you comfortable with the basic controls of the quadcopter. The first exercise will have you fly out to the furthest cone and then back. The second exercise will have you fly to the middle cone, and then fly back and forth sideways between cones one and three.

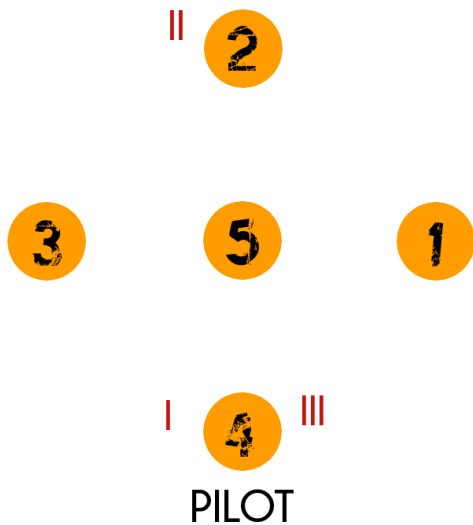
1.a. Starting from cone four, fly to cone two, and then back to cone four. Try to maintain as straight a line as possible. The goal here is to use the right stick as much as possible and move back and forth keeping the quadcopter always facing the same direction – away from the pilot.

1.b. Starting from cone four, fly to cone five, and then fly back and forth between cone three and cone one. This should give you practice strafing right and left.

For all exercise 1 practice, the quadcopter should always be facing the same direction as the pilot.

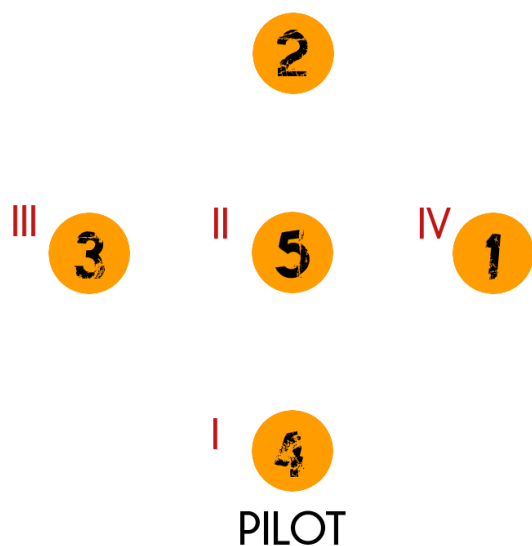
1.a. Elevator / pitch exercise

Drone Training Guide propwashed.com



1.b. Aileron / roll exercise

Drone Training Guide propwashed.com



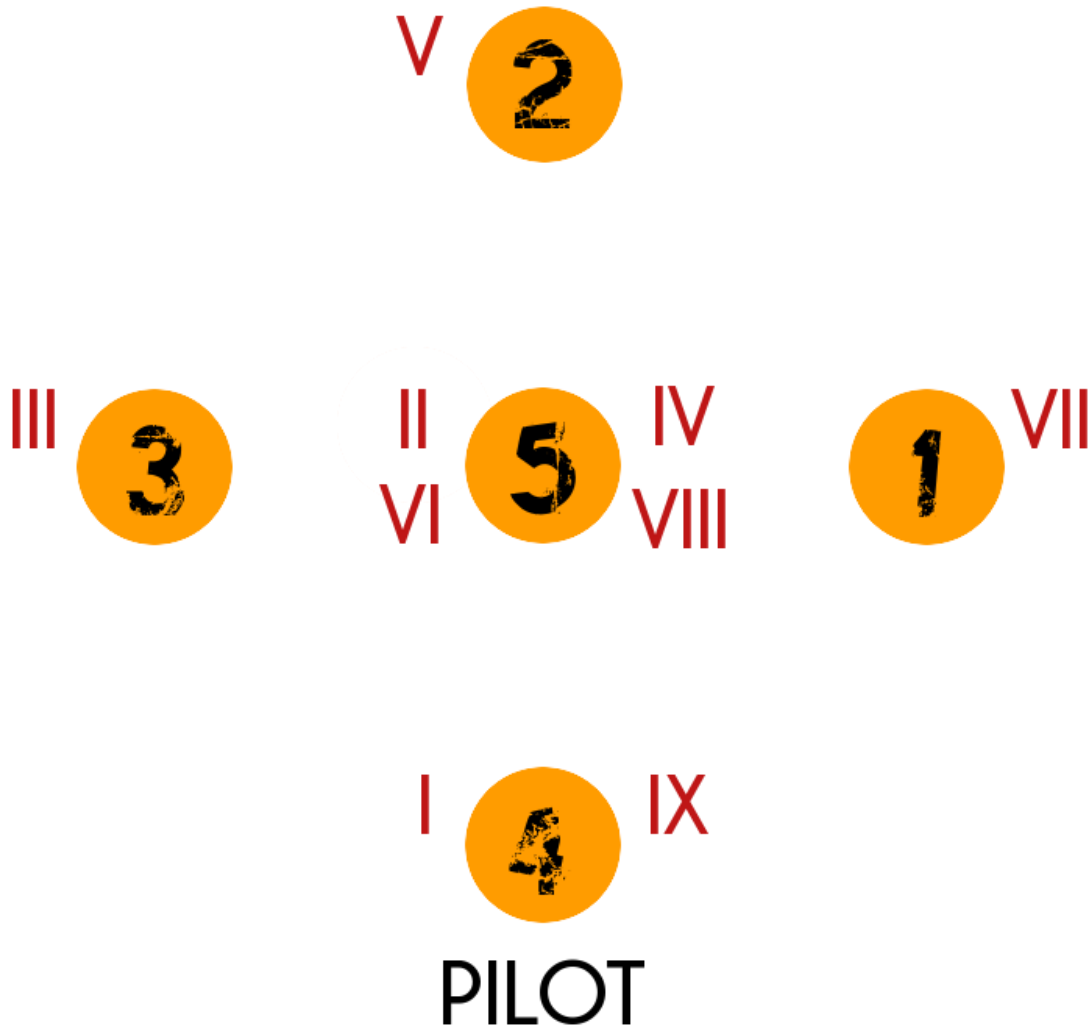
Exercise 2 – Pitch and Roll Combo [EASY]

This combines the first exercises to get you comfortable using the pitch and roll controls – basically getting really comfortable with the right stick controls. Focus on using the right stick to move around this course while maintaining altitude with the throttle (left stick up and down).

The goal here is to move from cone 4 to the middle of the course at cone 5. From cone 5, go to each of the other cones starting with cone 3 and then come back to cone 5. Repeat until you are able to do this smoothly and accurately.

For exercise 2 practice, the quadcopter should always be facing the same direction as the pilot.

Drone Training Guide propwashed.com

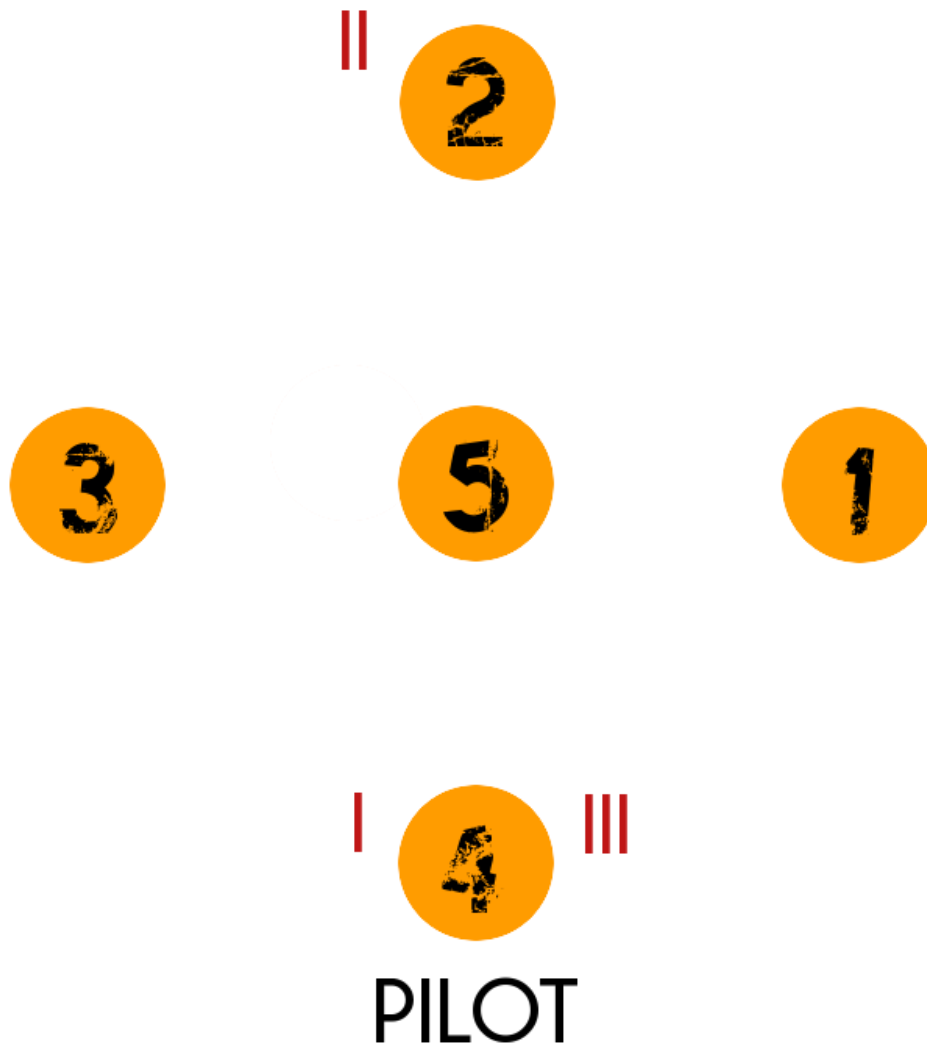


Exercise 3 – Basic Turning [Moderate]

Comfortable? Time to make things a bit more difficult. This time we are going to do a similar maneuver to our warm up exercise, except do a 180 degree turn at cone two and come back to cone 4. This will force you to now have the quadcopter facing you, which will make your roll and yaw controls backwards. Practice making turns around cone four and cone two while keeping the quad as straight as possible.

For exercise 3 practice, the quadcopter should always be facing the next target cone.

Drone Training Guide propwashed.com

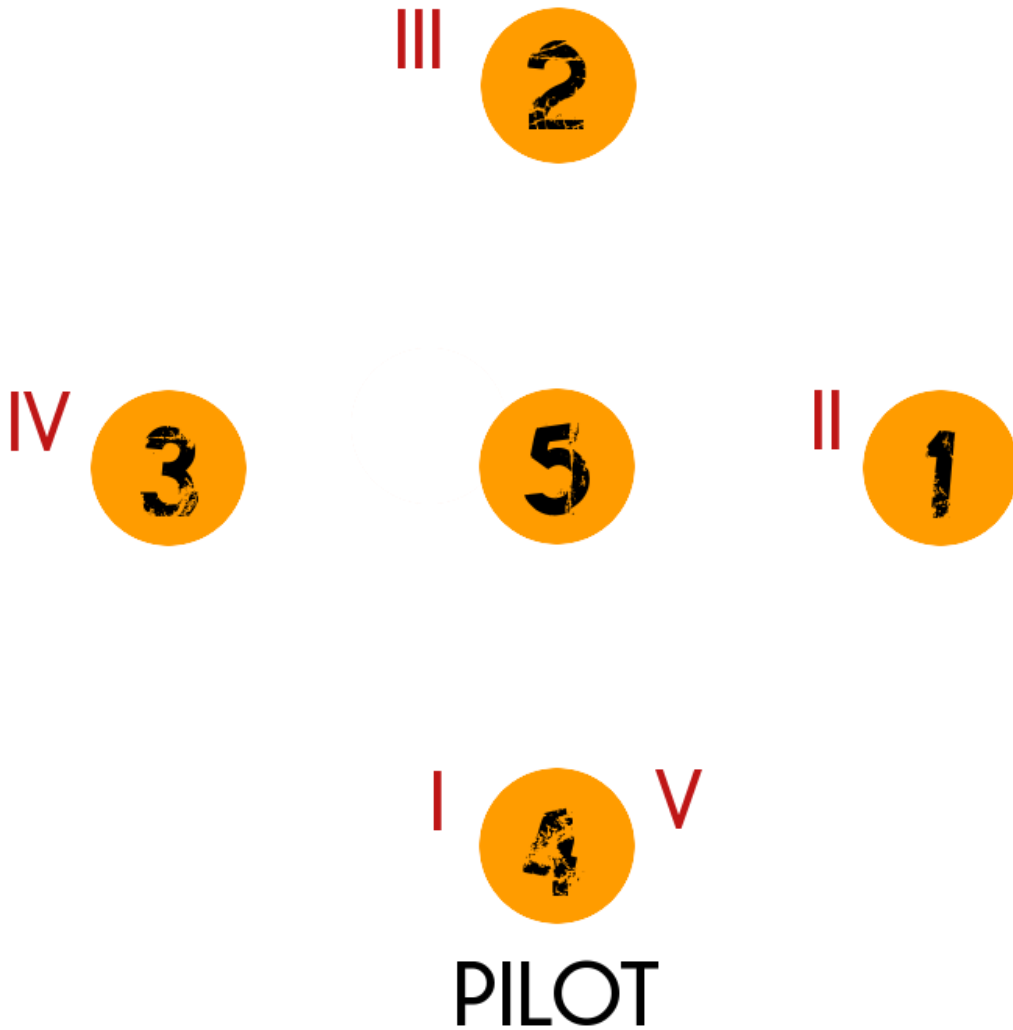


Exercise 4 – Round the cones [MODERATE]

Time to circle the cones! This time we are going to go around the diamond and use the left stick to rotate around each cone. Position yourself and the quadcopter at cone four and head towards cone one. At cone one, rotate 90 degrees using the left stick (left and right) to turn towards cone two. Continue along this path using the left stick to turn (yaw), and the right stick (roll) to correct any drift on the path.

For exercise 4 practice, the quadcopter should always be facing the next target cone.

Drone Training Guide propwashed.com



Exercise 5 – Figure 8 [HARD]

Similar to exercise 2, this exercise uses all the cones. Fly a figure 8 around the cones using cone five as your mid-point. This will allow you to practice preparing for a turn, turning precisely, and maintaining speed.

Starting from cone four, fly to cone three, turn and pass over cone five on the way to cone one. Then, turn and fly towards cone two. Turn again and pass over cone five on the way to cone four. Repeat until you are able to do this smoothly and accurately.

For exercise 5 practice, the quadcopter should always be facing the next target cone.

Drone Training Guide propwashed.com

